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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,002	07/02/2003	Manfred Hoppe	1997/D004C	4485
7590 12/10/2009 Connolly Bove Lodge & Hutz LLP 1220 Market Street PO Box 2207 Wilmington, DE 19899				
EXAMINER				
NILAND, PATRICK DENNIS				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
12/10/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/613,002

**Applicant(s)**

HOPPE ET AL.

**Examiner**

Patrick D. Niland

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 5, 7-12, 16 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-5, 7-12, 16, and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. The amendment of 7/28/09 has been entered. Claims 1, 4-5, 7-12, 16, and 19 are pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-5, 7-12, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combinations of the teachings of JP 60-015460 Suzuki et al. (supplied translation referenced), GB 1582743 Bennett et al. which appears to be an equivalent to DE 2818653 cited by the patent under reissue at column 1, lines 49-51 as teaching the instantly claimed component II, and GB 2030169 Altermatt et al..

Suzuki discloses the instantly claimed component I of claims 1, 4-5, 7-12 as a heat stable dye. Bennett discloses the instantly claimed component II as stated in the patent under reissue. See the entire document, particularly page 1, lines 1-36; page 2, lines 1-16; page 3, lines 1-65; page 4, lines 1-65, particularly 1-2 and 17-24; and the remainder of the document. Altermatt is cited as giving information relating to how various substituents affect the colors of the dyes of the instantly claimed formula II and further emphasizing the general point made by Bennett, page 4, lines 17-24 and to further establish the general state of the art regarding mixing of various dyes. See the entire document, particularly the table showing what color the dyes having the various substituents are, particularly but not limited to page 6, dyes 15-16.

The prior art considered does not disclose the instantly claimed combinations of ingredients and amounts thereof.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed combinations of ingredients because Suzuki and Bennett show that the instantly claimed dyes are known, Bennet, page 4, lines 17-21 states that their dyes may be used with the known coloring matters including azo dyes, Suzuki's dyes are azo dyes and would have been expected to impart their known heat stability and colors to the mixture of Bennet. The skilled artisan is generally aware of the desirability to combine dyes as shown by the entirety of the art cited above. Based on Beers Law and other well known undergraduate level spectroscopic means and theories, the skilled artisan would have expected the dye compositions of the instant claims to give a combination of the known colors of these dyes, in proportion to the amounts thereof used, in a manner such that the color, shade, hue, etc. of the final dye composition would have been predictable to the ordinary skilled artisan. This concept is further evidenced by the combination of various dyes many ordinary people have done to achieve a desired color such as mixing red and blue dyes to get purple of a desired shade, hue, and chroma. Since the above discussed dyes are all of a similar backbone and similar HLBs, they are expected to be compatible with each other such that they will not block, separate, and do the other things which dyes should not do and which are the subject of general textbooks in the art. There is no showing of unexpected results stemming from the instantly claimed combinations of materials and the amounts thereof in a manner commensurate in scope with the cited prior art and the instant claims. In re Lindner, 173 USPQ 356, (CCPA 1972) is cited for the general concept that a mixture of components which are of the same function is expected to give that same function to further support the above rejection's combination of references. For the above reasons, the instantly claimed amounts of ingredients would appear to give only

predictable results and the ordinary skilled artisan would have been motivated to use them if they desired the particular color, shade, hue, chroma, etc. which these amounts would provide. In simplified terms, if one wanted dark purple, they would know to mix dark blue in a large amount with red in a reduced amount. Bennett, page 4, lines 1-6 shows the method of mixing the above discussed dyes of the instant claims 10 and 14-15 to be generally known regarding using water, dispersant and dyes.

The prior art considered does not disclose the instantly claimed combinations of ingredients and amounts thereof.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use this method to mix the above discussed dye mixtures of the instant claims because it is the conventional means for dispersing such disperse dyes as shown by Bennett. Bennett also shows the instantly claimed dying and printing steps and the article resulting therefrom. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use this method to dye or print articles using the above discussed dye mixtures of the instant claims because it is the conventional means for dying and printing such articles as shown by Bennett.

The examiner did not engage in hindsight reconstruction. The proper motivation to combine the instantly claimed dyes was cited above. The examiner notes the new Supreme Court ruling *KSR International Co. v. Teleflex Inc.*, 550 U.S.—(page to be determined), 82 USPQ2d 1385 (2007) which supports the examiner's position as does the fact that the majority of the public has mixed different dyes to get desired colors making the general combination of known dyes *prima facie* obvious in view of the fact that the results are predictable to even little kids and are

particularly predictable to the ordinary skilled artisan in this field of invention, particularly given their high level of education and expertise and experience. The examiner maintains that the above rejection is a prima facie case of obviousness for all of the reasons cited above in this regard. Applicant's opinion that the Chemical Engineering Product Handbook which discloses mixtures of applicant's formula I and applicant's original formula II and an additional dyestuff is the closest prior art is contrary to the above cited rejection. The declaration is not commensurate in scope with the cited prior art for this reason.

The 132 declaration of 8/18/06 by Dr. Clemens Grund has been fully considered but is not persuasive for the following reasons. The declarant performed the experiments on dyes which were not commensurate in scope with the cited prior art and the instant claims. Thus, the declaration does not show unexpected results for the full scope of the above discussed combinations of dyes. The declarant's examples also do not consider the effects of different amounts of the dyes within the scope of the instant claims and the above cited rejection. The declarant's results are not commensurate in scope with the cited prior art and the instant claims for this reason. Furthermore, the declaration does not establish the pH resistance of the individual dyes so that the examiner can determine if there is an unexpected result from the dye combination or if the results of the declaration are merely due to the properties of the individual dyes themselves. Since the individual dyes are known, compositions containing the individual dyes of the prior art and the instant claims would have been expected to possess a combination of the properties inherent to the individual dyes. Thus, if the individual dyes show the declarant's stated pH dependent properties, these pH dependent properties would be expected in the dye combinations. Thus, no unexpected results can be determined from the declaration.

The applicant's statement of the above rejection is oversimplified. The examiner refers to the above rejection in this regard and to the teachings of the cited prior art. The applicant is reminded of Bennett page 4, lines 16-24 in addition to the other discussed motivations for combining the instantly claimed dyes.

Arguments regarding amounts and colors intended are not commensurate in scope with the claims that do not require the argued amounts and colors. It is impermissible to read limitations from the specification into the claims. "Good application properties" is relative because what one considers "good" depends on what effect they want to achieve and their personal desires. What one considers good another might consider bad.

The examiner has fully considered the Murgatroyd declarations of 5/1/08 and 2/20/08. These declarations are not commensurate in scope with the instant claims and the cited prior art because the exemplified dye mixtures possess certain pH, leveling agent, and dispersing agent not required of the instant claims nor the prior art. It is not seen that at other pHs, and without levelling agent and dispersing agent, or with different ingredients encompassed by the instant claims and the cited prior art, that the argued results are obtained. The above cited prior art and the instant claims are not limited to the declarant's dyes. The dye differences cannot therefore be determined to be responsible for the alleged unexpected results. The declarant does not identify the polyester used. Perhaps the unsaturated groups of the second dye may react with unsaturated groups of the polyester. The declarant does not specify what was done with sufficient specificity so that the examiner can determine if any differences in process steps are responsible for the alleged unexpected results. The examiner notes that none of the 4 declarations of record show the curve for mixture A. It therefore cannot be determined that the amounts encompassed by the

instant claims and the above rejection all give the alleged unexpected result. This is true of the amounts of other ingredient amounts encompassed by the instant claims and the cited prior art as well.

The Murgatroyd declaration of 7/28/09 has been considered and the other declarations of record have been reconsidered.

Regarding the declarant's statement that a yellow line was used for Dyestuff Mixture A of the declarant's graphs, the examiner sees no such line. The applicant is referenced to Public PAIR to see presumably what the examiner sees. The examiner's application is a scanned, digitized copy of what was submitted. It is likely that a faint yellow line did not scan properly. In any event, the examiner sees no line for Dyestuff Mixture A. The above objection remains therefore. The declarant's identifying the polyester is not a proper identification of the polyester in that it does not give the chemical formula, end groups, molecular weight, and other factors necessary to make the determinations discussed above regarding identity of the polyester. The objection above in this regard is maintained. The lack of specifying the process steps remains objected to. The declarant's statements in paragraph A.5. that the results would not have been different if other reasonable dying conditions would have been used is not supported by probative evidence. This is an unpredictable art. The declarant is necessarily trying to show unexpected results over the cited prior art. It is unseen how the declarant can state that the results would not have been different if other reasonable dying conditions would have been used in an unpredictable situation without probative evidence. If the declarant is aware of evidence that leads to the predictability of the declared "the results would not have been different if other reasonable dying conditions would have been used", the examiner requests that it be made of record. Furthermore, it is the



examiner's experience in considering hundreds of such declarations over about 20 years that the declarant and the examiner have viewed such declarations with a different eye in the past. Therefore, the examiner maintains that he needs to consider the processing steps to make a determination as to whether or not the declared results are expected or not. The declarant's discussion in paragraph C.1. that polyester dyeing is a physical rather than a chemical reaction is noted. However, the physical requires binding between the dye(s) and polyester. Such physical bonds are necessarily ionic, covalent, van der Waals, or hydrogen bonds. In the absence thereof, things do not stick together. No probative evidence to the contrary is seen. Furthermore, the reported result is not seen to occur for the dyes of the instant claims and the cited prior art which are not those of the declarations. No unexpected results are therefore seen for this scope of the instant claims over the cited prior art that is commensurate in scope with the cited prior art and the instant claims. Again, because this is a situation of establishing unexpected results, the examiner cannot determine if the other dyes of the instant claims and the cited prior art give the unexpected result purported by the declaration. The other objections noted above regarding the declarations are again noted, particularly that of the amounts of the various dyes used in the declarations verses the scope of the amounts encompassed by the instant claims and the cited prior art. For the above reasons, the applicant's declarations remain unpersuasive.

The applicant's arguments have been full considered but are not persuasive for the reasons stated above and for the teachings of the cited prior art. For the above reasons, this rejection is maintained.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Friday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 1714

/Patrick D. Niland/  
Primary Examiner  
Art Unit 1796